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**ABSTRACT OF THE DISCLOSURE**

A manipulator for servicing tubes extending through a tube sheet having three major components: a base member, a block member, and a foot member. The base member has a holder for supporting tooling or inspection devices. The base member also has at least one gripper for releasably gripping a tube extending through the tube sheet. The block member is connected to the base member for linear movement and rotation relative to the base member. The foot member is connected to the block member for linear movement relative to the block member. The foot member has at least one, and preferably two grippers, for releasably gripping a tube extending through the tube sheet. The manipulator supports itself using the two sets of expandable and translatable grippers that anchor into the tube ends and can move from tube to tube by alternately engaging each set of grippers.

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